

The Claims

1-20. (Canceled)

21. (Original) A method of implanting an electrical stimulation lead on, in, or near target nerve tissue in a person's brain stem, comprising:

selecting an electrical stimulation lead adapted for implantation on, in, or near the brain stem for electrical stimulation of target nerve tissue in the brain stem, the lead comprising a plurality of electrodes adapted to be positioned on, in, or near the target nerve tissue in the brain stem and to deliver electrical stimulation energy to the target nerve tissue in the brain stem, the lead comprising an inner channel configured to accommodate a removable stylet;

inserting a needle into the person's epidural space at a desired vertebral level;

inserting a guide wire through the needle and into the epidural space;

removing the needle from the epidural space, leaving the guide wire in position;

inserting an introducer over the guide wire and into the epidural space;

positioning the introducer posteriorly in a desired location within the epidural space at the level of the foramen magnum;

removing the guide wire from the epidural space, leaving the introducer in position;

inserting the electrical stimulation lead including the removable stylet through the introducer and into the epidural space overlying the medulla;

positioning the electrical stimulation lead on, in, or near the targeted nerve tissue in the brain stem; and

removing the stylet from the electrical stimulation lead, leaving the lead in position on, in, or near the target nerve tissue in the brain stem for electrical stimulation of the target nerve tissue in the brain stem.

22. (Original) The method of Claim 21, wherein the electrical stimulation lead selected is adapted for a specific location in the brain stem.

23. (Original) The method of Claim 21, wherein the electrical stimulation lead is positioned using stereotactic imaging.

24. (Original) The method of Claim 21, wherein the electrical stimulation lead is positioned using a navigation system.

25. (Original) The method of Claim 21, wherein the electrical stimulation lead is anchored at a specific location on, in, or near the brain stem.

26. (Original) The method of Claim 25, wherein the electrical stimulation lead is anchored using one or more of sutures, biocompatible glue, adhesive strips and mechanical tethers.

27-39. (Canceled)